

U.S. Department of Defense

Patient Safety Program

Decision Brief

Department of Defense (DoD) Session
Patient Safety Solutions Center

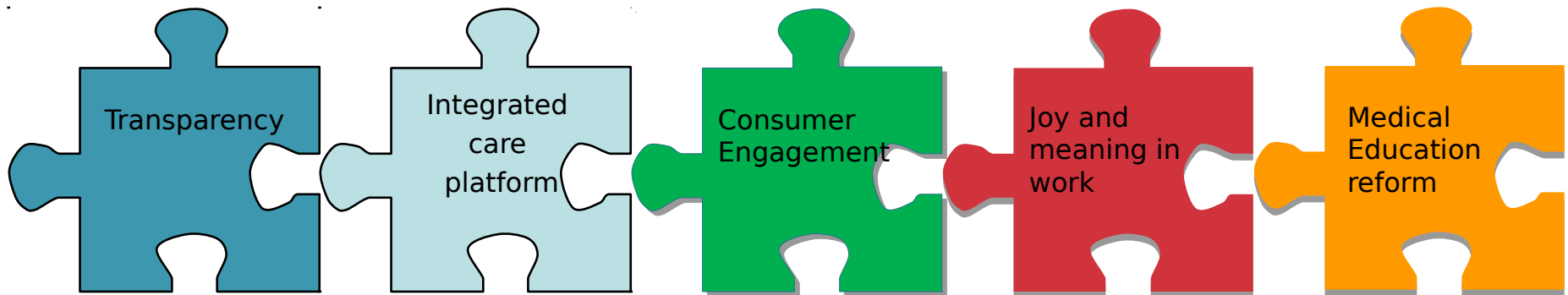
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Start With a Vision: Transformation



"We envision a culture that is open, transparent, supportive, and committed to learning; where doctors, nurses, and all health workers treat each other and their patients competently and with respect; where the patient's interest is always paramount; and where patients and families are fully engaged in their care."



Transformation is an integrated
process.

Lucian L. Leape, et al. "Transforming Healthcare: A Safety Imperative." *Quality and Safety in Healthcare* Volume 18, Issue 6 (2009): 424-428

DoD Patient Safety Program fits within the MHS Quadruple Aim



The MHS Quadruple Aim



Readiness: Enabling a medically ready force, a ready medical force, and resiliency of all MHS personnel.



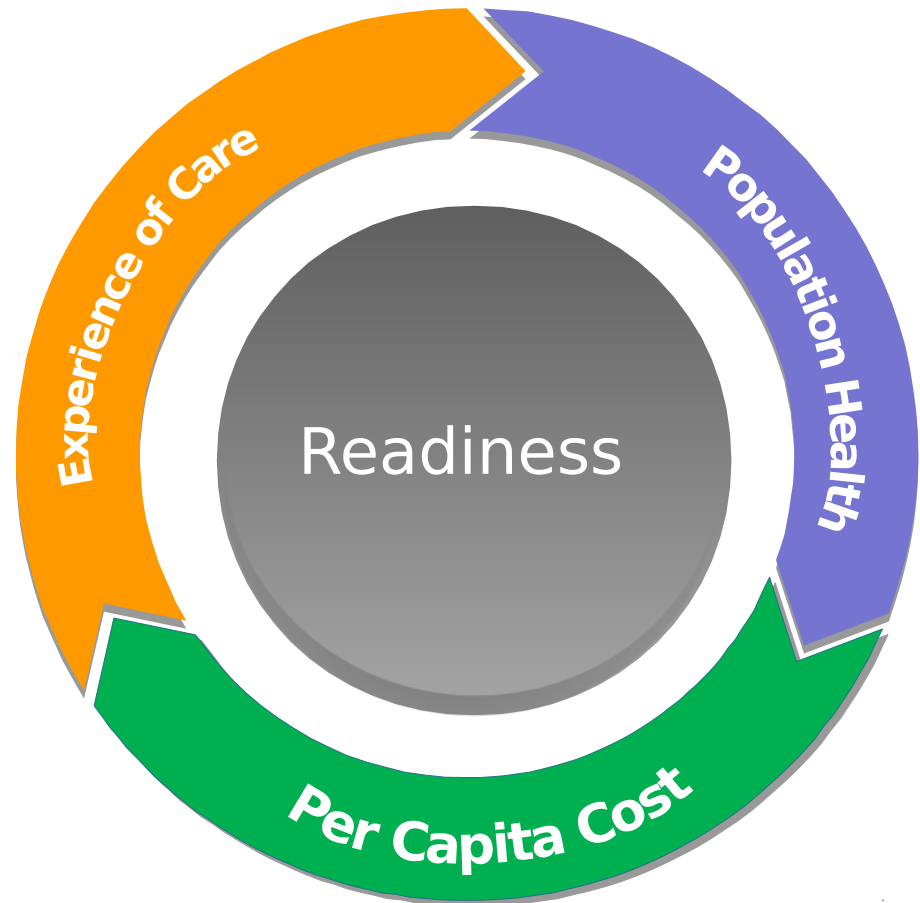
Experience of Care: Patient and family centered care that is seamless and integrated. Providing patients the care they need, exactly when and where they need it.



Population Health: Improving quality and health outcomes for a defined population. Advocating and incentivizing healthy behaviors.



Per Capita Cost: Managing the cost of providing care for the population. Eliminate waste and reduce unwarranted variation; reward outcomes, not outputs.



MHS Strategic Plan



The MHS published a new strategic plan in summer 2008

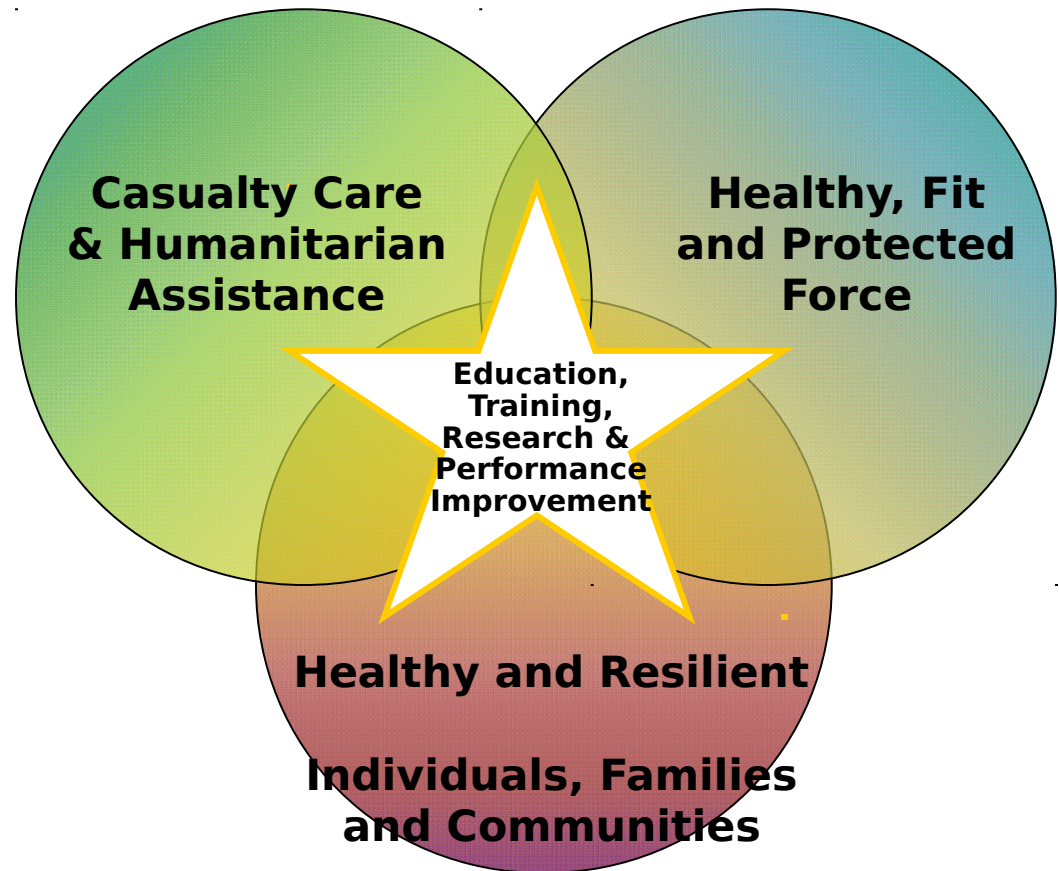
The MHS Four Mission Elements:

MHS Mission

Our team provides optimal Health Services in support of our nation's military mission—anytime, anywhere.

MHS Vision Statement

- ▶ The provider of premier care for our warriors and their families
- ▶ An integrated team ready to go in harm's way to meet our nation's challenges at home or abroad
- ▶ A leader in health education, training, research and technology
- ▶ A bridge to peace through humanitarian support
- ▶ A nationally recognized leader in prevention and health promotion



Strategic Priorities: Where does Patient Safety fit?



MHS Strategic Priorities 2008-2010

1. Enhance warrior care -
2. Build a bridge to peace -
3. Promote patient choice and accountability -
4. Communicate MHS value, and build an interactive community -
5. Deliver information to people so they can make better decisions -
6. Continuously improve quality and value -
7. Support and develop our people -
8. Strengthen medical education and research
9. Improve governance by aligning authority and accountability

Strategic Priorities

Promote patient choice and accountability, promote healthy communities and demonstrate MHS commitment to safety and quality outcomes

Communicate MHS value, and build an interactive community to improve clinical quality, performance and integration

Patient Safety Initiatives

► Deploy a web-based Patient Safety Reporting System (PSR)

► Deploy the AHRQ-developed, web-based Patient Safety Culture Survey to all MHS fixed facilities

► Champion the TeamSTEPPS® Communication Campaign across the MHS direct care system

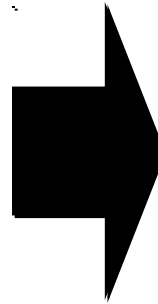
Note: These are examples; many more exist...

DoD Patient Safety: Moving to a Greater Partnership



Begin Partnerships

- Enable local patient safety champions (Patient Safety Managers and change teams) to identify, prevent, and address errors to enhance patient safety at the DoD facility level
- Provide centralized resources, activities, and initiatives for local patient safety champions to promote patient safety



Advance Partnerships

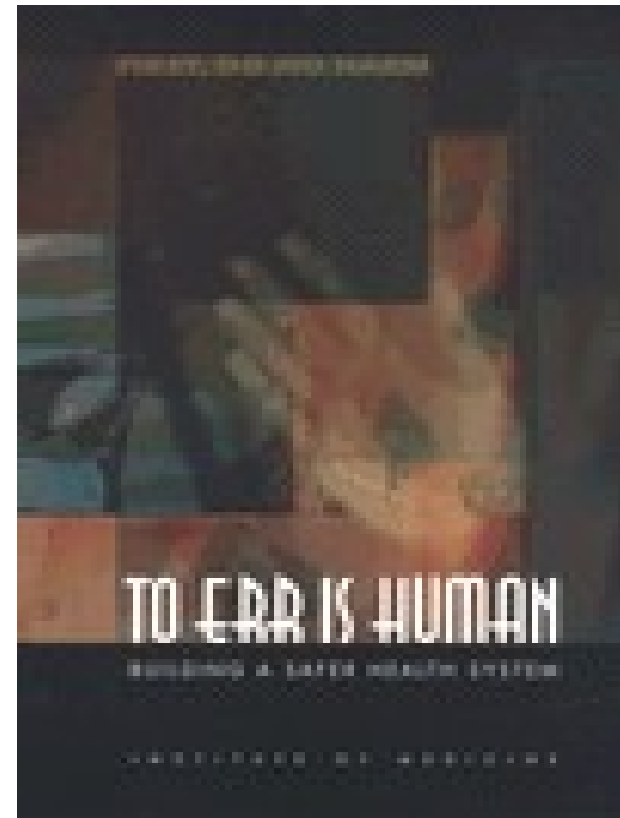
- Create more interactive forums where local champions can quickly learn from one another
- Establish relationships between errors and potential solutions
- Help local champions prioritize patient safety activities/initiatives

The Challenge



❖ 1999 IOM Report:

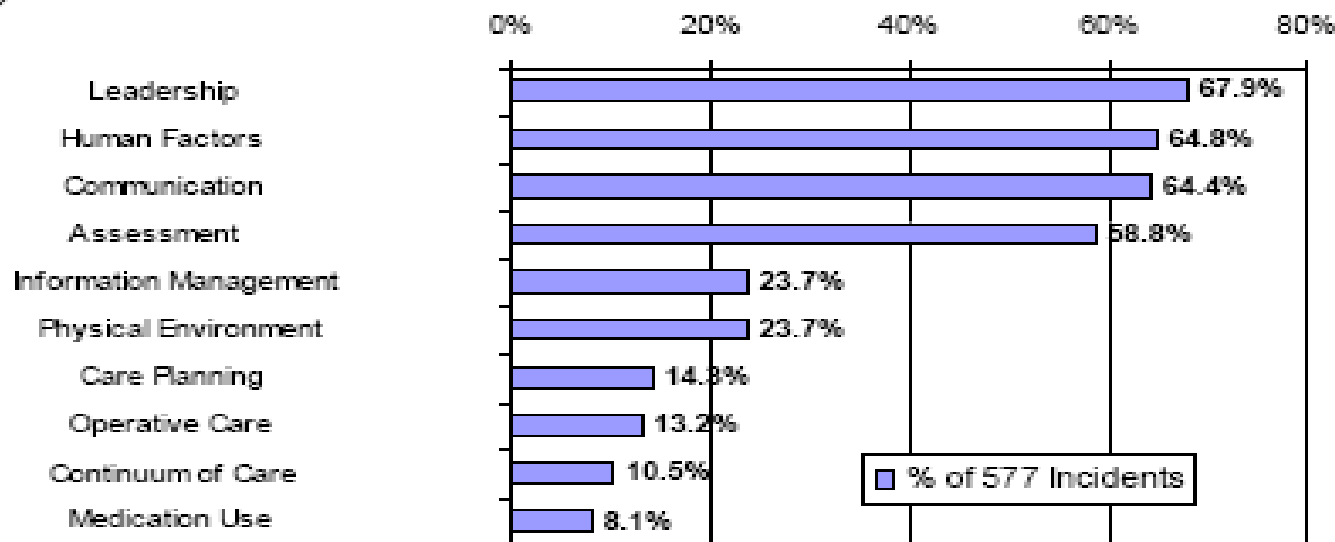
- "...tens of thousands of Americans die each year from errors in their care and hundreds of thousands suffer or barely escape from non-fatal injuries"
- 44,000-98,000 deaths
- Million injuries
- Most preventable



Top Ten for Sentinel Events: The Joint Commission 2009



Top Ten Factors Identified for Sentinel Events Reported in 2009



The Joint Commission

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Why a Teamwork Initiative?

- Approximately 98,000 deaths per year due to preventable medical errors in the US (IOM, 1999)
- **60% of preventable medical errors are a result of communication breakdown**
- Evidence indicates teamwork:
 - Reduces errors/improves outcomes
 - Increases effectiveness and efficiencies
 - Results in increased patient and staff satisfaction



- Prevent iatrogenic patient harm
- Transform the MTF into a High Reliability Organization (HRO)
- On par with:
 - Navy Nuclear Power
 - Carrier Flight Deck Operations

MHS Culture of Safety



Patient Safety Culture Area	Overall MHS % Positive		Difference	Change
	2005/ 2006	2008		
1. Teamwork Within Work Areas	75	76	+1	↑
2. Supervisor/Manager Expectations & Actions Promoting Patient Safety	72	73	+1	↑
3. Management Support for Patient Safety	71	73	+2	↑
4. Organizational Learning—Continuous Improvement	68	70	+2	↑
5. Overall Perceptions of Patient Safety	66	67	+1	↑
6. Feedback and Communication About Error	64	64	0	—
7. Frequency of Events Reported	60	63	+3	↑
8. Communication Openness	61	61	0	—
9. Teamwork Across Work Areas	59	60	+1	↑
10. Handoffs and Transitions	47	49	+2	↑
11. Staffing	45	46	+1	↑
12. Nonpunitive Response to Error	44	45	+1	↑

What are YOUR results?



What is TeamSTEPPS?

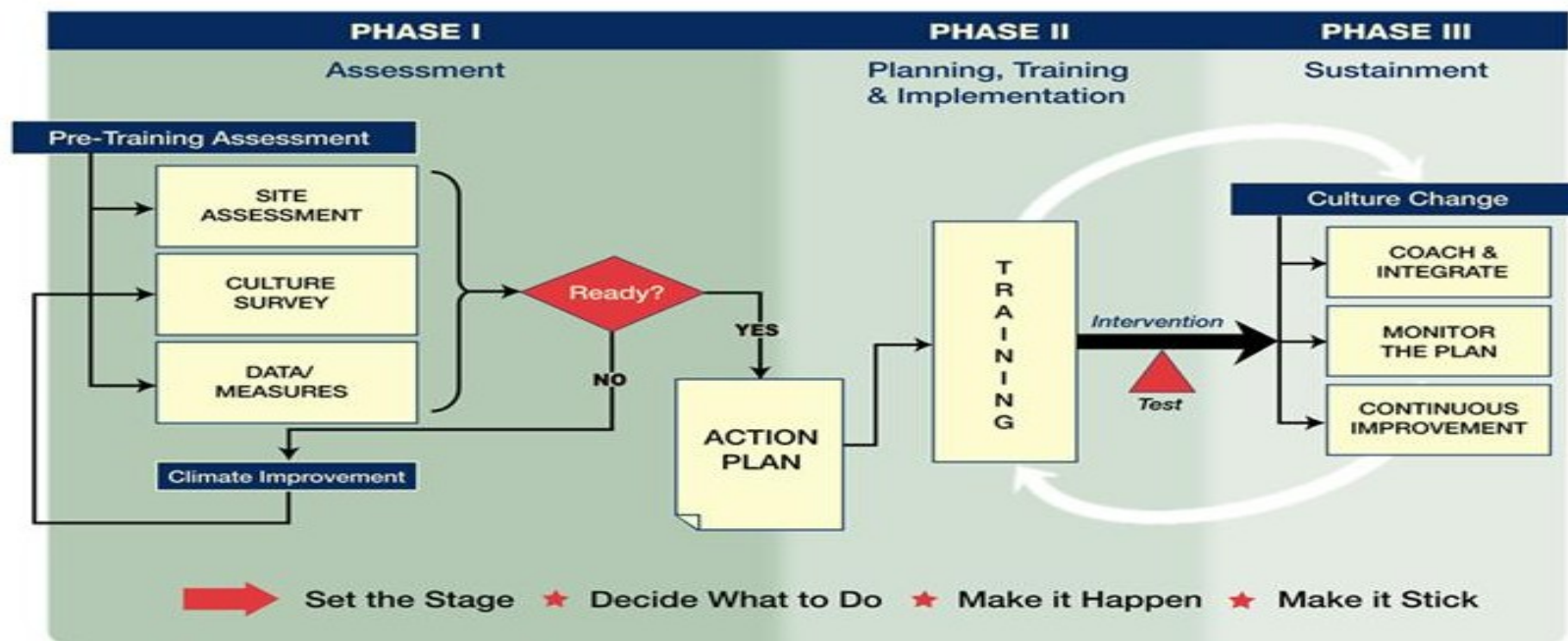
TeamSTEPPS Goal:

To produce highly effective medical teams that optimize the use of information, people, and resources to achieve the best clinical outcomes for our beneficiaries

TeamSTEPPS is an evidence-based teamwork system aimed at optimizing patient outcomes by **improving communication and other teamwork skills** among healthcare professionals; a powerful solution to improve patient safety.

- Comprehensive suite of training curricula, videos, and resources
- Designed to integrate teamwork principles into practice in healthcare
- Provides practical tools and strategies adaptable to any healthcare setting

TeamSTEPPS Roll-Out

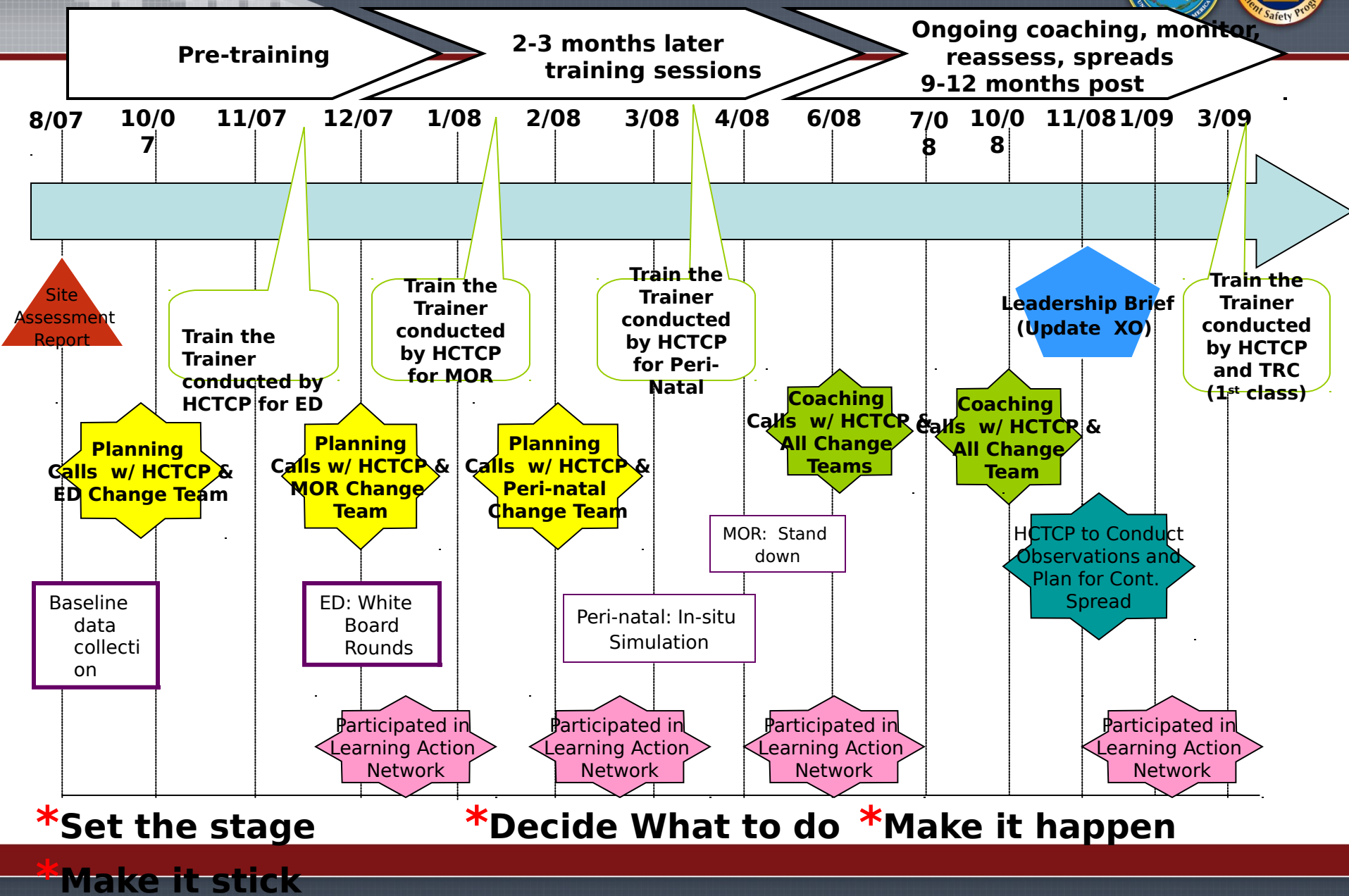


Spread, impact, and sustainability take time and commitment



- Phase I: Site Assessment: *Set the Stage*
 - 2-3 Days on-site
 - Follow-up report
- Phase II: Planning, Training, Implementation: *Make it Happen*
 - Train the Trainer: 2.5 – 3 days (Includes simulation practice)
 - Train the Participant (Staff): 1 or 4 hours
- Phase III: Sustainment: *Making it Stick*

TeamSTEPPS Initiative Timeline: Potential



- Effective communication
- An environment of “psychological safety”
- Thirst for feedback & output metrics
- Accountability
- Teamwork

*Team*STEPPS

Team Competency Outcomes

Knowledge

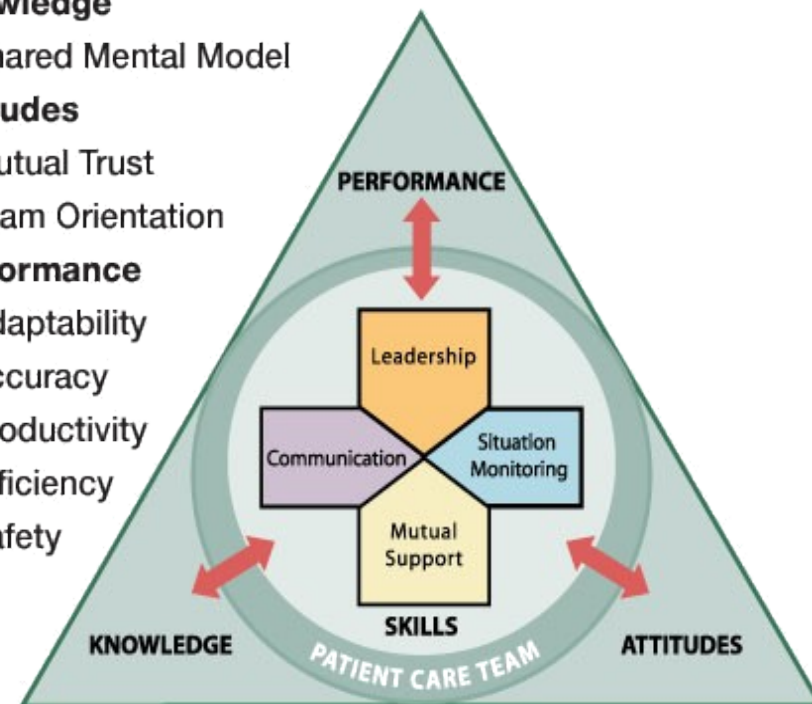
- Shared Mental Model

Attitudes

- Mutual Trust
- Team Orientation

Performance

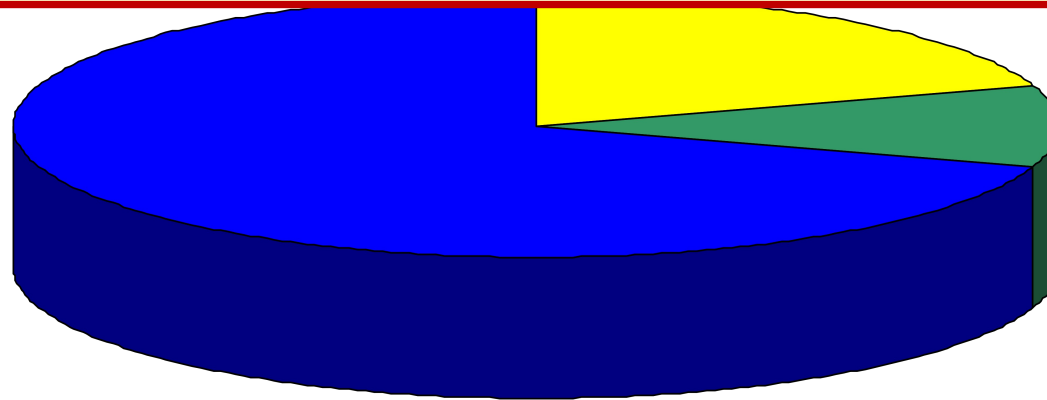
- Adaptability
- Accuracy
- Productivity
- Efficiency
- Safety





Why practice opportunities are critical to achieve successful training transfer

Salas et al. 2009: 20% of variations in team performance due to training quality, 80% to organizational factors



- Preparation and Readiness: 20%**
- Learning Intervention: 10%**
- Application Environment: 70%**



Organizational Barriers & Success Factors

Success Factors:

- *Visible* leadership support
- Frontline champions & “coaching”; staff “buy-in”
- Communication campaign
- Integration into normal ops
- On-going measurement (*with feedback to staff*) to monitor and show impact
- Planning
- Training: newcomer, refresher; customized to mission

Challenges:

- Staff turnover & shortages
- Leadership turnover
- Deployments
- Lack of visible leadership support
- Lack of frontline staff support
- Bad actors – no accountability system
- Limited time for training

Training Evaluation



Level 5 - Return on Investment Was the training worth the cost?

Did the training behavior positively affect the organization?

Level 3 - Behavior, Training Transfer
Did the participants change their behavior on-the-job based on what they learned?

Organizational Factors

Level 2 - Learning: What skills, knowledge, or attitudes changed after training? By how much?

Level 1 - Reaction: Did the participants like the training?

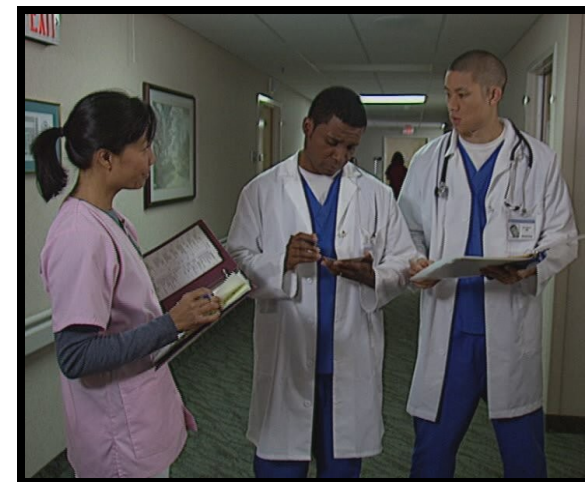
What do they plan to do with what they learned?

Individual Pre-training Experiences & Attitudes

Sample MTF Reports of L4 Outcomes (N = 14)



Staff have clear direction of plan (white boards)
Decreased “patient harm” incidence and “patient safety event” reports
Increased adherence to best practices
Increased information transfer accuracy
Glitch capture and correction – knowledge, training, equipment gaps/problems
Increased staff and patient satisfaction
Reduced nursing report time
Improved equipment/staff utilization & efficiency (e.g. decreased OR start/turnover delays)
Increased patient appointment availability
Increased efficiency per patient encounter





Roles and Responsibilities: MTF and TMA/PSP

TMA/PSP

- **Conduct site assessment and follow-up with report (May do 2-3 visits)**
- **Determine best training option with NMCSO (on-site, TRCs, eLearning, Tool Kits, etc)**
- **Customize curriculum for NMCSO**
- **Conduct or coach Train the Trainer with multidisciplinary staff**
- **Provide training and sustainment materials (DVDs, Pocket Guides, Cards, Posters, etc.)**
- **Provide external coaching and consultation**
- **Provide opportunities to support learning**
 - **Commander's Forum, Learning Action Networks, Webinars, Collaborative**
- **Pay travel costs**

MTF

- **Success Factors**
- **Identify members of Guiding Coalition and Change Teams**
 - **All complete the eGuide to Action prior to training**
- **Participate in site assessment as observes and interviewers**
- **Prepare and make available data requirements (Culture Survey, satisfaction, etc.)**
- **Attend training and prepare to "pay it forward"**
- **Complete Action Plan; Includes:**
 - **Training, Coaching, Communication, and Evaluation Plans**
- **Participate in external coaching and consultation calls with TMA**
- **Develop a mechanism to monitor and collect information on progress of plans**

• **Provide success stories**

Patient Safety Communication Toolbox



<http://health.mil/dodpatientsafety>



source – U.S. Department of Defense (Air Force)

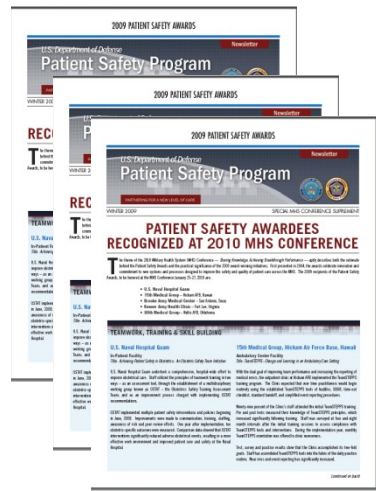
Secure connection



Public Web site



Webinars



Newsletter



Promotional materials

DOD information sharing forum



Event reporting analysis

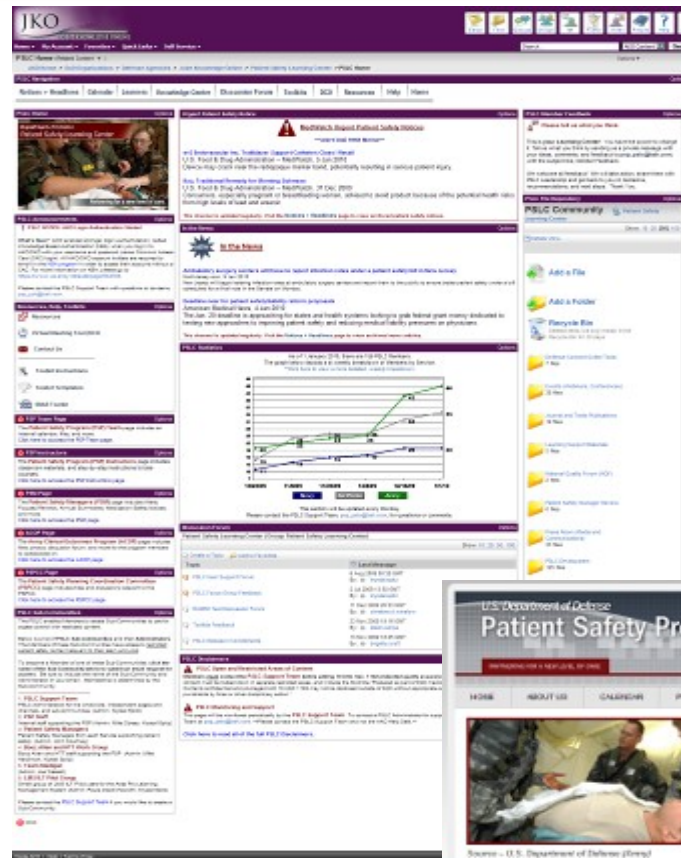
DoD Patient Safety Learning Center



Share knowledge in a secure online portal for Tri-Service collaboration

- Online discussion forums
- DoD patient safety information
- Lessons learned from RCAs
- Calendar of learning events and activities
- Virtual meeting tools
- Training materials, toolkits, and resources
- Specialty communities

Register for and login at
<http://health.mil/dodpatient>
safety





Back-Up Slides



Safe Practices, 2009 Update: Creating & Sustaining a Culture of Safety

- Safe Practice 1: Leadership Structures and Systems
- Safe Practice 2: Culture Measurement, Feedback, and Intervention
- Safe Practice 3: Teamwork Training and Skill Building
- Safe Practice 4: Identification and Mitigation of Risks and Hazards

Are we leading the MHS to a culture of safety?

...Focusing on 4 of 34 safe practices

Actively engaged leadership

- “Inadequate leadership is a contributing factor in over 50% of sentinel events”
 - Joint Commission, 2006





Emergency Department¹

After implementation of multiple medical team training programs:

- Improved observed team behaviors.
- Enhanced staff attitudes toward teamwork.
- Reduced observed clinical errors.

Clinical Units in a Medical Center²

After implementation of SBAR to improve communication among clinical caregivers:

- Reduced rate of adverse drug events (from 30 to 18 per 1,000 patient days).
- Improved medication reconciliation at patient admission from 72% to 88% and at discharge from 53% to 89%.

1. Morey, JC, Simon, R, Jay GD, et al. Error reduction and performance improvement in the emergency department through formal teamwork training: Evaluation results of the MedTeams project. *Health Serv Res.* 37:1553-1581, 2002
2. Haig, K., Sutton S, Whittington, J. SBAR: A shared mental model for improving communication between clinicians. *JL Comm J Qual Patient Saf* 32(3):167-75, March 2006.

What Can TeamSTEPPS Do for Us?



Labor and Delivery Units¹

After implementation of multiple teamwork strategies and tools:

- A 50% reduction in the Weighted Adverse Outcome Score (WAOS). The WAOS describes the adverse event score per delivery.
- A 50% decrease in the Severity Index, which measures the average severity of each delivery with an adverse event.

Intensive Care Units (ICU)²

After implementation of a "Patient Daily Goals" form to facilitate staff communication:

- A 50% decrease in mean ICU length of stay from 2.2 days to 1.1 days.

1. Mann, S, Marcus, R, Sachs, B. Lessons from the cockpit: How team training can reduce errors on L&D (Grand Rounds) Contemporary OB/Gyn v51 i1:34(8), January 2006.
2. Pronovost, P, Berenholtz, S, Dorman, T, Lipsett, PA., Simmonds, T, Haraden, C. Improving communication in the ICU using daily goals. J Cri Care 18(2):71-5, Jun 2003.

What Can TeamSTEPPS Do for Us?



Operating Rooms (OR)

After implementation of a “pre-op” brief:

- Increased OR communication.^{1,2}
- Increased administration of properly timed prophylactic antibiotics prior to incision from 84% to 95%.¹
- Increased pre-op deep vein thrombosis prophylaxis prior to induction from 92% to 100%.¹
- Error avoidance: Pre-op brief revealed seven patients (3.3%) with previously unidentified severe surgical risks — surgery cancelled.¹
- A 16% reduction in nursing turnover rate.²
- A 19% increase in OR employee satisfaction.²

1. Awad, SS, Fagan, SP, Bellows, C., Albo, D, et al. Bridging the communication gap in the operating room with medical team training. *Am J Surg* 190(5): 770-4, Nov 2005.
2. Leonard, M., Graham, S, Bonacum, D. The human factor: The critical importance of effective teamwork and communication in providing safe care. *Qual Saf Health Care* 13 Suppl 1:i85-90, Oct 2004.